

Amendments to the Specification:

Please delete the paragraph beginning on page 1 at line 18 with the words “The method most widely used” and extending through the end of Table 1.

Please insert the following new paragraph beginning on page 1, line 18:

The method most widely used for analysing nucleic acid sequences is the enzymatic “chain termination” technique, developed by Sanger et al. in Proceedings of National Academy of Science, 74, 1977, p. 5463-5467 [1]. It is based on the properties of DNA-dependent DNA polymerases to create DNA polymers complementary to the sequence of a DNA strand serving as a template, from a mixture of natural nucleoside triphosphate monomers. The process consists, starting with the DNA strand to be analysed, in making a series of copies of the complementary strand by adding to the conventional reaction medium molecules known as “chain terminators” and then analysing the length of the newly formed strands to determine the base sequence of the template. The principle of the method is explained in Table 1 shown as Figure 5.

Please delete the paragraph beginning on page 3 at line 24 with the words “On the other hand” and extending through the end of Table 2.

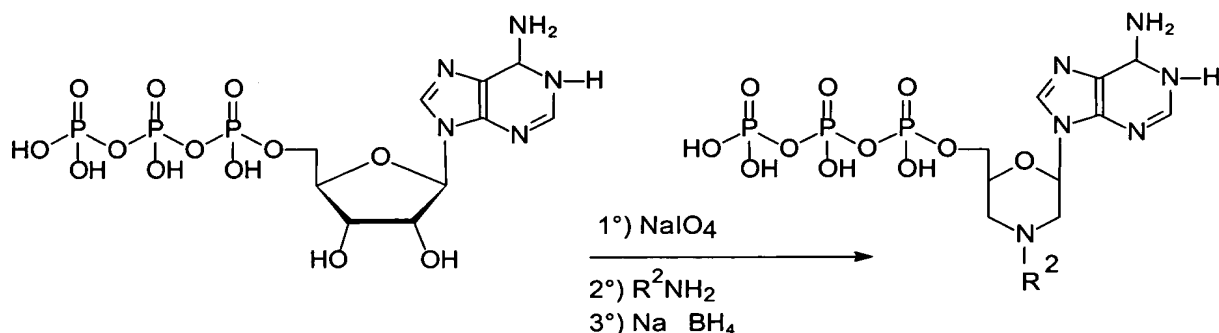
Please insert the following new paragraph beginning on page 3, line 24:

On the other hand, if a molecule which is recognized by the polymerase but which has no free 3'-OH terminal end is added to the reaction medium, each time this molecule is incorporated, the polymerization work of the enzyme will be interrupted because the chain can no longer grow on account of the absence of a site available to attach a new nucleotide (creation of interrupted newly-formed strands). This is illustrated in Table 2 shown as Figure 6 with 3'-deoxythymidine 5'-triphosphate.

Please delete the paragraph beginning on page 12 at line 14 with the words “The nucleotide derivatives” and extending through the reaction scheme.

Please insert the following new paragraph on page 12 beginning at line 14:

The nucleotide derivatives used in the process of the invention may be prepared in a single step, directly from ribonucleoside triphosphates, according to the following reaction scheme illustrated with R¹ representing adenine.



Please insert the following two new paragraphs after the paragraph beginning on page 15, line 18 beginning with the words "Figure 4 is a scheme illustrating":

Figure 5 illustrates hybridization of a primer strand with a DNA template strand followed by incorporation of 5' thymidine triphosphate into the primer strand by a DNA polymerase.

Figure 6 illustrates hybridization of a primer strand with a DNA template strand followed by incorporation of 3'-deoxythymidine 5'-triphosphate into the primer strand by a DNA polymerase.

Amendments to the Drawings:

Please insert new Figures 5 and 6 that are attached hereto into the application. The content of these Figures was previously present in the text of the specification and is now being submitted as Figures for the application.